Just-In-Time Math Skills Support for Finance and Fair Division Summary

Pre-Algebra:

Know The Following Definitions

- Define Variables
- Define Algebraic Expression
- Order of Operations
- Similar (Like) Terms
- Distributive Property

Be Able To

- Apply the order of operations to simplify algebraic expressions
- Evaluate algebraic expressions
- Apply the distributive property to simplify algebraic expression

Solving Linear Equations:

Know The Following Definitions

- Define Algebraic Equations
- Addition Property of Equality
- Multiplication Property of Equality
- Formula

Be Able To

- Apply the Addition Property of Equality to solve a linear equation in one variable
- Apply the Multiplication Property of Equality to solve a linear equation in one variable
- Apply both the Addition and Multiplication Property of Equality to solve a linear equation in one variable
- Apply both the Addition and Multiplication Property of Equality to solve a formula for a specified variable
- Construct and solve basic percent
- Construct and solve number problems
- Write numbers in scientific notation and as they might appear on a calculator.

Polynomials:

Know The Following Definitions

- Monomials
- Binomials
- Polynomials
- Exponent
- Base
- Product Rule for Exponents: $a^m \cdot a^n = a^{m+n}$
- Power-to-a-Power Rule for Exponents: $(a^m)^n = a^{mn}$
- Product-to-a-Power Rule for Exponents: $(ab)^m = a^m b^m$
- Quotient Rule for Exponents: $\dfrac{a^m}{a^n} = a^{m-n}$
- Negative Rule for Exponents: $a^{-n} = \dfrac{1}{a^n}$ where $a \neq 0$
- Integer Exponents: $a^0 = 1$
- Quotient-to-a-Power for Exponents:
- $\left(\dfrac{a}{b}\right)^m = \dfrac{a^m}{b^m}$

Be Able To

- Add Polynomials
- Subtract Polynomials
- Multiply Polynomial
- Simplify expressions using Product Rule for Exponents
- Simplify expressions using Power-to-a-Power Rule for Exponent
- Simplify expressions using Product-to-a-Power Rule for Exponents
- Simplify expressions using Quotient Rule for Exponents
- Simplify expressions using Negative rule for Exponents
- Simplify expressions using Integer Exponents Rule
- Simplify expression using Quotient-to-a-Power Rule for Exponents